

## SPECIFICATION AMENDMENTS

Please amend paragraph [00113] as follows:

[00113] Figure 11 shows a flowchart illustrating the operations that are performed during resource reservation and cancellation in response to detected resource unavailability in accordance with one embodiment. The process begins in a block [[1300]] 1100, in which an ingress node generates a control burst in response to a network access request, and the control burst is then routed between the ingress node and intermediate switching nodes until it reaches the egress node to which the destination network is coupled to set up resource reservations along the lightpath. For example, in the illustrated example of Figure 10, it is desired to send traffic comprising a data burst from external network 1040 (*i.e.*, the source) to external network 1056 (*i.e.*, the destination). Thus, the ingress node will be edge node A, while the egress node will be edge node F. Accordingly, a control burst is generated at edge node A having a format discussed above with reference to Figures 8 and 9, and sent out to reserve resources along a route build by concatenating multiple lightpath segments to form a lightpath between the ingress and egress edge nodes A and F. An exemplary route (lightpath) shown in Figure 10 is depicted using a dash-dot-dash line format, and includes lightpath segments 1034, 1004, 1016, 1028, 1032, and 1044, which are coupled between edge node A, switching node 1, switching node 3, switching node 5, switching node 6, switching node 7 and edge node F, respectively.

Please amend paragraph [00130] as follows:

[00130] Once the resource cancellation control burst is generated, it is routed upstream and/or downstream along the lightpath so that it is received and processed at corresponding switching and edge nodes, as indicated in a block 1108. In one embodiment, the mechanism for routing the resource cancellation control burst is similar to that employed for routing a "normal" control burst. In general, data is extracted at each switching node is used to determine the "next hop" in the lightpath chain. For example, in one embodiment, data from reservation table 1200 is extracted to determine the next hop. When the PBS burst ID is stored in Key column [[1102]] 1202, corresponding next-hop routing information for both upstream and downstream nodes can be easily extracted. First, the reservation record is retrieved based on the PBS burst ID value. Once retrieved, the next upstream hop

corresponds to the switching or edge node connected to the fiber link coupled to the output fiber port specified by the value in Output Fiber Port column 1210 or identified by the value in Output Lightpath Segment ID column 1214. Similarly, the next downstream hop corresponds to the switching or edge node connected to the fiber link couple to the input fiber port (as specified by the value in Input Fiber Port column 1204) or identified by the value in Input Lightpath Segment ID column 1208.

Please amend paragraph **[00132]** as follows:

**[00132]** Returning to the flowchart of Figure **[[13]] 11**, in a block **[[1310]] 1110**, processing of the resource cancellation control burst is performed, resulting in cancellation of the corresponding resource reservations. For example, a resource reservation may be cancelled by deleting (*i.e.*, removing) the record specified by the PBS burst ID, or marking the record as invalid via a change to the value in Status column **[[1220]] 1120**. As each switching node considers existing reservations when determining whether to accept a reservation request, canceling the resource reservation has the effect of releasing the resource for subsequent use during the reserved timeslot.